

AMENDMENTS TO THE SPECIFICATION

Please amend the specification as follows:

Paragraph/Section [0014] Fig. 2 shows a standard gas generating apparatus which is one of concrete embodiments of an apparatus using the invention for switching between the supply and stop of a plurality of fluids and mixing these fluids.

a1 Reference gas A and subject gas B are mixed at a constant ratio by using a part or the entirety of massflow controllers 21 in which plural kinds of flow rates are set in advance thereby to generate a mixed gas (hereinafter called "standard gas") along with switching valves 22a - 22h. Fig. 2 shows an example where four massflow controllers for the subject gas (21b to 21e) are disposed.

Paragraph/Section [0017] As shown in Fig. 1A, a nozzle portion 3 is provided at the fluid exhausting portion of the switching valve 2 for supplying and stopping another fluid, that is, the subject gas B, and the tip end 4 of the nozzle portion is disposed at the center portion of the flow of the aforesaid one fluid, that is, the reference gas A.

a2 In general, when the fluid flows within a flow path having a constant tubular diameter at a predetermined flow rate, the flow rate becomes ~~minimum~~ quite large at the center portion of the tube and the flow rate becomes quite ~~large~~ small at the portion near the wall of the tube, as shown in Fig. 1C. In this respect, the lengths of arrows show flow rates at the positions within the tube, respectively. Thus, when the subject gas B is injected at the center portion of the flow of the reference gas A, the ratio of the flow rates between the reference gas and the subject gas

can be reduced to one several-th (a quarter or less) as compared with the case where the subject gas is injected at the wall of the tube.

Further, in this case, since the subject gas B is injected from the tip end 4 of the nozzle portion having a thinner inner diameter, the subject gas is blown out within the flow of the reference gas A with a quite large flow rate at the tip end portion of the nozzle portion.

Therefore, the ratio of the flow rates between the reference gas A and the subject gas B becomes quite small as compared with the case where the nozzle 3 is not employed, so that the blocked state of the subject gas B at the switching valve exhausting port and the insufficient *U2* mixture with the reference gas A can be prevented from being generated. Thus, the fluid can be exhausted smoothly from the tip end 4 of the nozzle portion and so the gases can be mixed smoothly. Fig. 1B shows a mixed state of the reference gas A and the subject gas B in the open state of the switching valve 2.

To be more concrete, it has been proved from the experiments of the inventors that in the case of flowing the reference gas A at a flow rate of 4L/min within a tube having an inner diameter of 4mm and injecting the subject gas B therein at a flow rate of 8mL/min, these gases can be mixed quite well when the inner diameter of the nozzle is 2mm or less.